

ПРИМЕНА НА СОФТВЕР

ENSI ECONOMY Software

в.проф.д-р **Доне Ташевски**

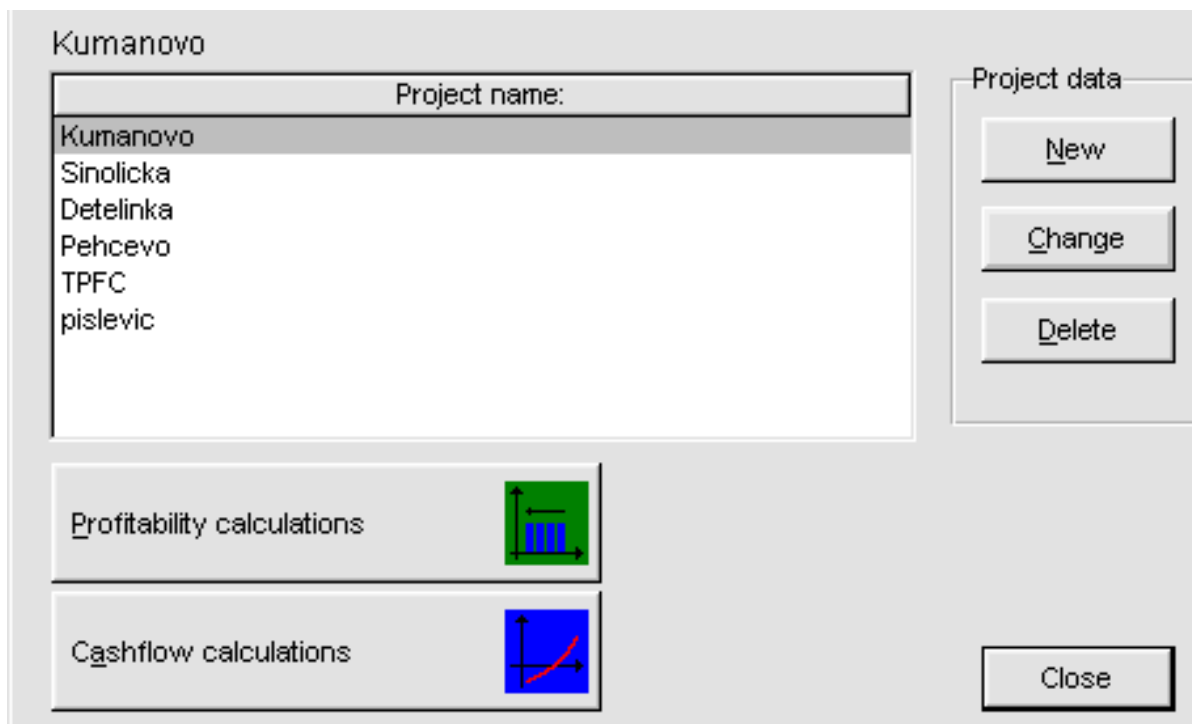
Обука за енергетски контролори



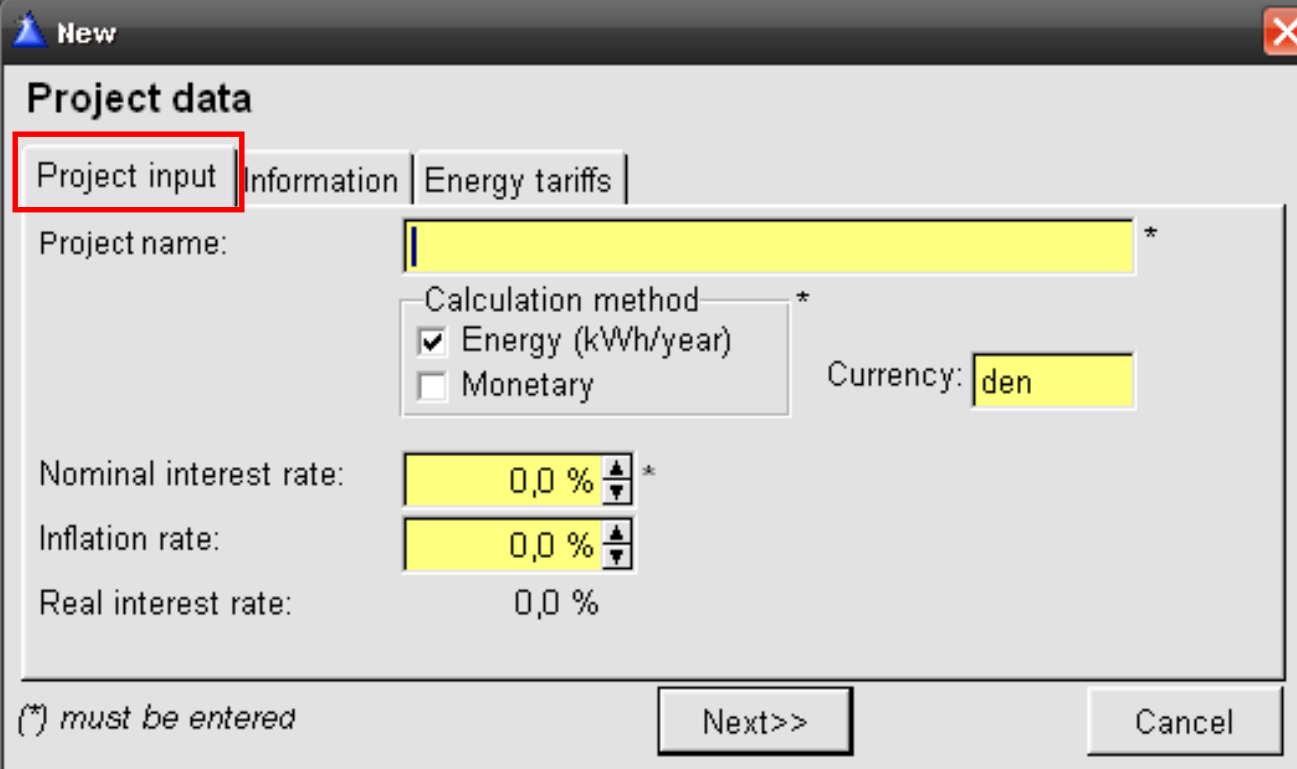
Влезна страна во програмот ENSI Economy Software



Влез во програмот



Внесување на основни податоци (Име на проектот, Метод на пресметка, Каматна стапка, Инфлација, Валута)



The image shows a software dialog box titled "New" with a close button in the top right corner. The dialog is divided into three tabs: "Project input" (highlighted with a red box), "Information", and "Energy tariffs".

Under the "Project input" tab, the following fields are visible:

- Project name:** A text input field with a yellow background and an asterisk (*) indicating it is required.
- Calculation method:** A group box containing two radio buttons:
 - Energy (kWh/year) *
 - Monetary
- Currency:** A text input field with a yellow background containing the value "den".
- Nominal interest rate:** A spinner control with a yellow background, set to "0,0 %" and an asterisk (*).
- Inflation rate:** A spinner control with a yellow background, set to "0,0 %".
- Real interest rate:** A text input field containing "0,0 %".

At the bottom left, there is a note: "(*) must be entered". At the bottom right, there are two buttons: "Next>>" and "Cancel".



Основни информации за лицето кое ја врши пресметката

New [Close]

Project data

Project input **Information** | Energy tariffs

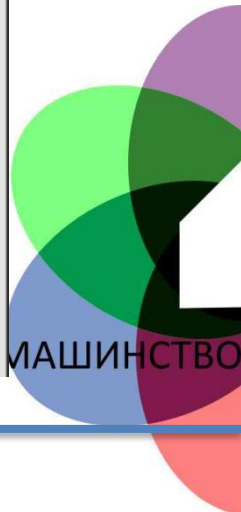
Calculated by: *

Address:

Phone number:

(*) must be entered

Next>> Cancel



Цени на енергија

New ✕

Project data

Project input | Information | **Energy tariffs**

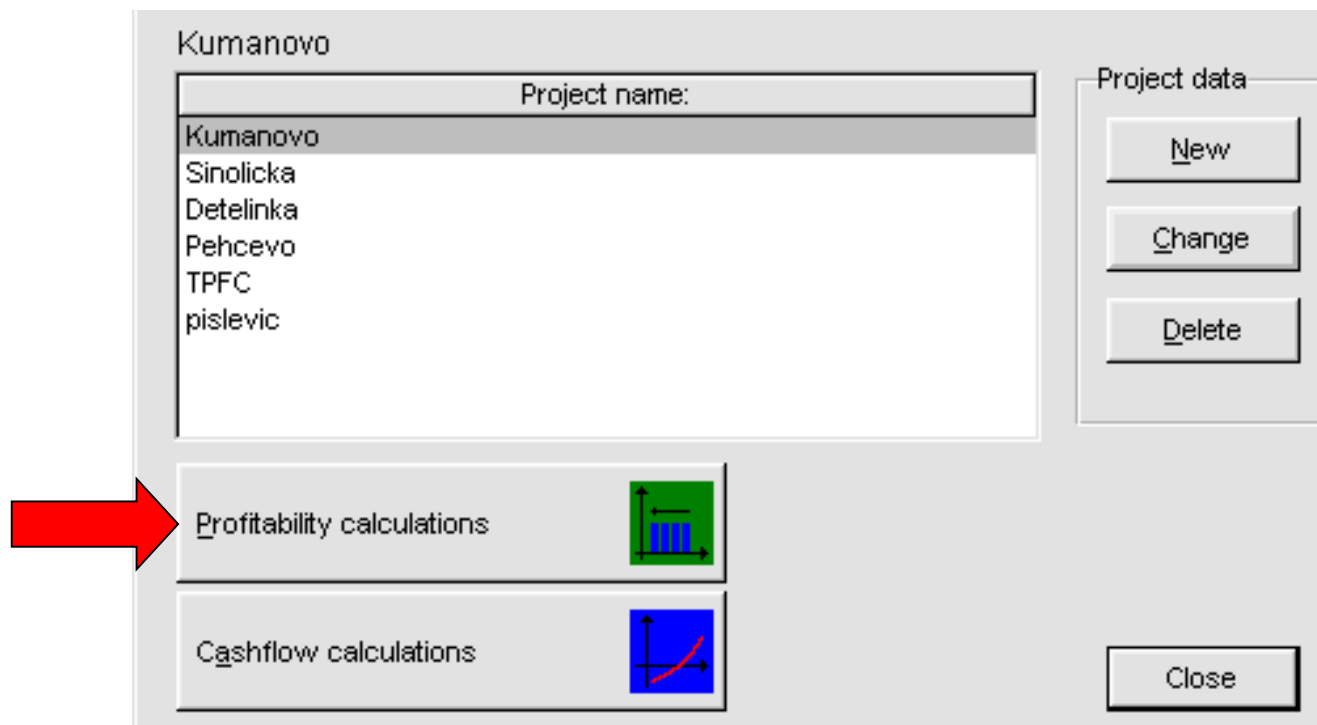
	Energy price	Power price
1: District Heating	4,800 den/kWh	0,00 den/kWh *
2: Electricity	6,000 den/kWh	0,00 den/kWh
3: Oil/gas	60,000 den/kWh	0,00 den/kWh
4:	0,000 den/kWh	0,00 den/kWh

(*) must be entered

Next>> Cancel



Пресметка на профитабилност - Исплатливост



Внесување на потатоците за секоја мерка

Нова мерка

Measures

Project: Kuma

All Measures

Measure:
Tavan
Avtomatika
Termostatski ventili
U-zid
Istiranje na TEP
Prozorci

Measures

New

Energy calculations

Project name: Kumanovo

Measure: Measure name?

Total investment: 0 MKD

Energy source 1: 1 2 Ttoplinska

Savings kWh/year: 0 kWh/year * 6,280 MKD/kWh = 0 MKD

Savings kW: 0 kW * = 0 MKD

Energy source 2: No 1 2 Electricity

Savings kWh/year: 0 kWh/year * 6,300 MKD/kWh = 0 MKD

Savings kW: 0 kW * = 0 MKD

Total savings: 0 MKD

Annual O & M cost: 0 MKD

Net savings: 0 MKD

Economic lifetime: 10 Years

Max pay-off: 10 Years (For calculation of Max Investment)

Real interest rate: 4,45 %

Profitability	
Payback:	0,0
Pay-off:	0,0
Internal Rate of Return:	0,0 %
Net Present Value:	0
Net Present Value Quotient:	0,00
Maximum Investment:	0

Renovation Measure
 Non-profitable Measure
 Indoor Environment Measure

able Measure

AL

stment:

3.483.540 MKD

ngs:

542.510 MKD

ack:

6,4 years

off:

7,7 years

Close

Cancel OK



Промена на податоци за веќе внесена мерка

Measures

Project: Kuma

All Measures

Measure:
Tavan
Avtomatika
Termostatski ventili
U-zid
Isfrlanje na TEP
Prozorci

Measures

New



Energy calculations

Project name: Kumanovo

Measure: Tavan

Total investment: 550.440 MKD

Energy source 1: 1 2 Ttoplinska

Savings kWh/year: 42.399 kWh/year * 6,280 MKD/kWh = 266.270 MKD

Savings kW: 0 kW * = 0 MKD

Energy source 2: No 1 2

Savings kWh/year: 0 kWh/year * = 0 MKD

Savings kW: 0 kW * = 0 MKD

Total savings: 266.270 MKD

Annual O & M cost: 0 MKD

Net savings: 266.270 MKD

Economic lifetime: 10 Years

Max pay-off: 10 Years (For calculation of Max Investment)

Real interest rate: 4,45 %

Profitability

Payback:	2,1
Pay-off:	2,2
Internal Rate of Return:	47,4 %
Net Present Value:	1.561.804
Net Present Value Quotient:	2,84
Maximum Investment	2.116.614

- Renovation Measure
- Non-profitable Measure
- Indoor Environment Measure

Cancel

OK

able Measure

AL
stment:

3.483.540 MKD

ngs:

542.510 MKD

ack:

6,4 years

off:

7,7 years



Close

Резултати од софтверот - Сите мерки

Measures

Project: Kumanovo

All Measures
 Profitable Measures
 Renovation Measures
 Indoor Enviroment Measures
 PIR
 Non-profitable Measure

Measures	Investment	Net savings	PB	PO	IRR	NPV	NPVQ	Max. Investment	
								1)	2)
Tavan	550.440	266.270	2,1	2,2	47%	1.561.804	2,84	2.116.614	10,0
Avtomatika	36.900	16.370	2,3	2,4	43%	92.959	2,52	130.127	10,0
Termostatski ventili	61.200	16.370	3,7	4,2	24%	68.659	1,12	130.127	10,0
U-zid	630.000	127.900	4,9	5,7	16%	384.594	0,61	1.016.693	10,0
Isfrlanje na TEP		26.700			0%	211.803	0,00	212.242	10,0
Prozorci	2.205.000	88.900	24,8	99,0	0%	-1.499.782	-0,68	706.677	10,0

TOTAL Investment: 3.483.540 MKD

Savings: 542.510 MKD


Payback: 6,4 years

Pay-off: 7,7 years

Measures:

Real interest rate: 4,4 %

1) Maximum investment with 2) years pay-off



Профитабилни мерки

Measures

Project: Kumanovo

Measures	Investment	Net savings	PB	PO	IRR	NPV	NPVQ	Max. Investment	
								1)	2)
Tavan	550.440	266.270	2,1	2,2	47%	1.561.804	2,84	2.116.614	10,0
Avtomatika	36.900	16.370	2,3	2,4	43%	92.959	2,52	130.127	10,0
Termostatski ventili	61.200	16.370	3,7	4,2	24%	68.659	1,12	130.127	10,0
U-zid	630.000	127.900	4,9	5,7	16%	384.594	0,61	1.016.693	10,0

TOTAL

Investment: 1.278.540 MKD


Savings: 426.910 MKD

Payback: 3,0 years

Pay-off: 3,3 years

Measures:

Real interest rate: 4,4 %



1) Maximum investment with 2) years pay-off

Реновирачки мерки

Measures

Project: Kumanovo

Measures	Investment	Net savings	PB	PO	IRR	NPV	NPVQ	Max. Investment	
								1)	2)

TOTAL Investment: 0 MKD
Savings: 0 MKD
Payback: 0,0 years
Pay-off: 0,0 years

Measures

Real interest rate: 4,4 %

1) Maximum investment with 2) years pay-off

Внатрешни мерки кои влијаат врз околината

Measures

Project: Kumanovo

Measures	Investment	Net savings	PB	PO	IRR	NPV	NPVQ	Max. Investment	
								1)	2)

TOTAL Investment: 0 MKD
Savings: 0 MKD
Payback: 0,0 years
Pay-off: 0,0 years

Real interest rate: 4,4 %

1) Maximum investment with 2) years pay-off

Мерки според исплатливоста

Measures

Project: Kumanovo

Measures	Investment	Net savings	PB	PO	IRR	NPV	NPVQ	Max. Investment	
								1)	2)
Tavan	550.440	266.270	2,1	2,2	47%	1.561.804	2,84	2.116.614	10,0
Avtomatika	36.900	16.370	2,3	2,4	43%	92.959	2,52	130.127	10,0
Termostatski ventili	61.200	16.370	3,7	4,2	24%	68.659	1,12	130.127	10,0
U-zid	630.000	127.900	4,9	5,7	16%	384.594	0,61	1.016.693	10,0

TOTAL Investment: 1.278.540 MKD


Savings: 426.910 MKD

Payback: 3,0 years

Pay-off: 3,3 years

Measures:

Real interest rate: 4,4 %



1) Maximum investment with 2) years pay-off

Непрофитабилни мерки

Measures

Project: Kumanovo

All Measures | Profitable Measures | Renovation Measures | Indoor Environment Measures | PIR | Non-profitable Measure

Measures	Investment	Net savings	PB	PO	IRR	NPV	NPVQ	Max. Investment	
								1)	2)
Isfrlanje na TEP		26.700			0%	211.803	0,00	212.242	10,0
Prozorci	2.205.000	88.900	24,8	99,0	0%	-1.499.782	-0,68	706.677	10,0

TOTAL Investment: 2.205.000 MKD

Savings: 115.600 MKD

Payback: 19,1 years

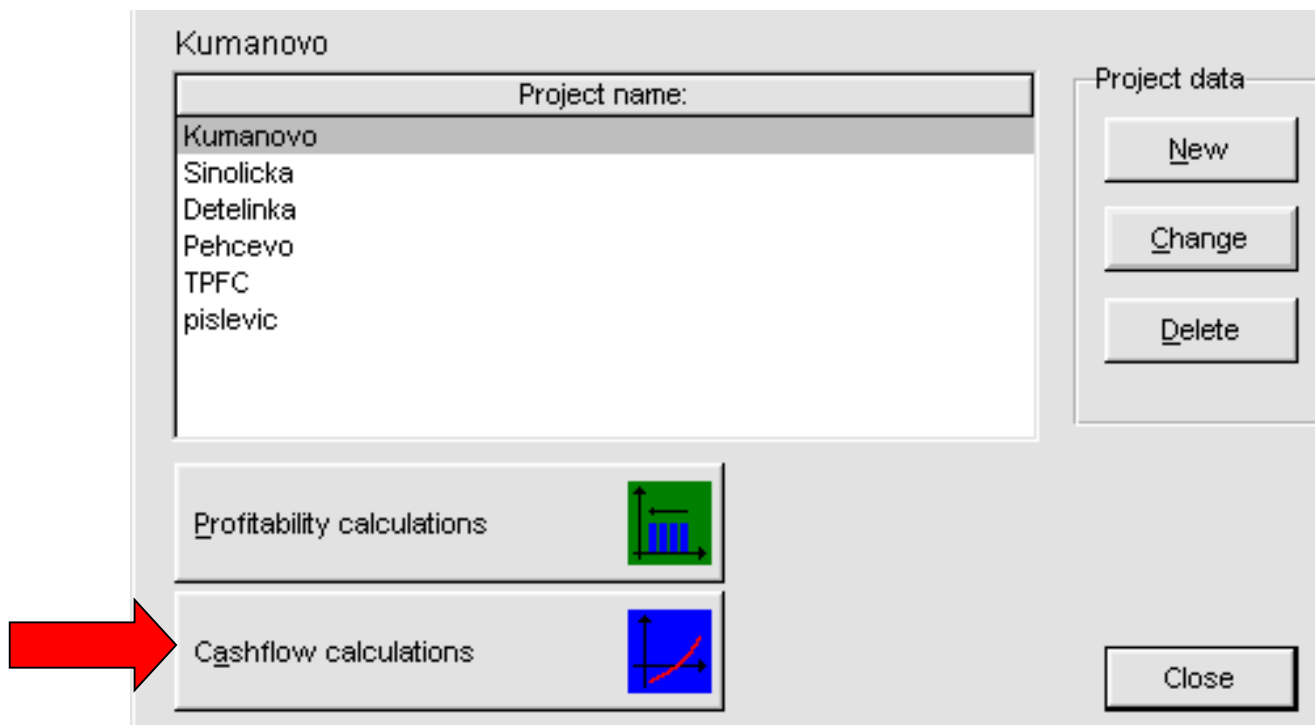
Pay-off: 43,4 years

Measures:

Real interest rate: 4,4 %

1) Maximum investment with 2) years pay-off

Пресметка на текот на парите




Алтернативи


Cashflow

Project: Kumanovo
Alternative:

Alternatives | Loan condition | Cashflow

Alternative name	Economic conditions																														
	<table border="1"><thead><tr><th></th><th>Source 1</th><th>Source 2</th></tr></thead><tbody><tr><td>Annual savings:</td><td>0 MKD</td><td>0 MKD</td></tr><tr><td>Annual O & M:</td><td>0 MKD</td><td>0 MKD</td></tr><tr><td>Net savings:</td><td>0 MKD</td><td>0 MKD</td></tr><tr><td>Inflation rate:</td><td>0,0 %</td><td>0,0 %</td></tr><tr><td>Economic lifetime:</td><td colspan="2">0 years</td></tr><tr><td>Equity capital:</td><td colspan="2">0 MKD</td></tr><tr><td>Grant:</td><td colspan="2">0 MKD</td></tr><tr><td>Loan:</td><td colspan="2">0 MKD</td></tr><tr><td>Total investment:</td><td colspan="2">0 MKD</td></tr></tbody></table>		Source 1	Source 2	Annual savings:	0 MKD	0 MKD	Annual O & M:	0 MKD	0 MKD	Net savings:	0 MKD	0 MKD	Inflation rate:	0,0 %	0,0 %	Economic lifetime:	0 years		Equity capital:	0 MKD		Grant:	0 MKD		Loan:	0 MKD		Total investment:	0 MKD	
	Source 1	Source 2																													
Annual savings:	0 MKD	0 MKD																													
Annual O & M:	0 MKD	0 MKD																													
Net savings:	0 MKD	0 MKD																													
Inflation rate:	0,0 %	0,0 %																													
Economic lifetime:	0 years																														
Equity capital:	0 MKD																														
Grant:	0 MKD																														
Loan:	0 MKD																														
Total investment:	0 MKD																														

New alternative  Change alternative Delete alternative

Print 
Close

Алтернативи – економски услови

Cashflow

Project: Kumanovo

Cashflow input

Alterr Economic conditions Loan conditions

Alter

Project name: Kumanovo

Alternative: Alternative Name?

Cashflow period: 10 year

Equity capital: 0 MKD

Grant : 0 MKD

Total loan: 0 MKD

Source 1 Source 2


Annual savings: 0 MKD 0 MKD

Annual O & M: 0 MKD 0 MKD


Net savings: 0 MKD 0 MKD

Inflation rate: 0,0 % 0,0 %

Next>> OK Cancel Total investment: 0

New alternative  Change alternative Delete alternative

Close



Алтернативи – услови на заемот

Cashflow

Project: Kumanovo

Cashflow input

Economic conditions | **Loan conditions**

Loan from: Bank 1

Amount: [] [] []

Interest: 0,0 % [] [] []

Years: 0 [] [] []

Term: 1 month [] [] []

Type of loan: Annuity Serial Annuity Serial Annuity Serial

Grace period: No [] [] []

Next>> OK Cancel Total investment: 0

New alternative [] [] [] Close



Услови на заемот


Cashflow


Project: Kumanovo

Alternative:

Alternatives | **Loan conditon** | Cashflow

Loan from:	Amount	Interest	Years	Term	Type of loan	Grace periode

New alternative  Change alternative Delete alternative

Print 

Close



